

Docket No. 217 – Development and Management Plan Inspection

Northeast Utilities Service Company Certificate of Environmental Compatibility and Public Need for the construction of a 345-kV electric transmission line and reconstruction of an existing 115-kV electric transmission line between Connecticut Light and Power Company's Plumtree Substation in Bethel, through the towns of Redding, Weston, and Wilton, and to the Norwalk Substation in Norwalk, Connecticut.

Date: February 16, 2006

Inspector: Diana Walden

Location: Overhead Line (Composite 345kV and 115kV Gallows Hill to Archers Lane) and (345kV H-Frame Hoyts Hill to Gallows Hill)

Storm/

Rain Event: Approximately 0.13" of precipitation fell, mostly in the form of snow between 2/11-2/12 as reported by NOAA. Totals may actually be higher than reported.

Areas of Inspection	Observation	Recommended Action
Access Roads and Adjacent Roadways	- The Composite ROW work is accessible from Gallows Hill Road by an existing trail path with a swing gate, an approved access path in from the east of the ROW, an access road passing through the Archers Lane substation, and an area cleared from the station to the ROW. 2/16/06	- With freezing and thawing periods, additional measures for stability should be considered for access needs. If any areas still have ruts at the end of the work, it will have to be regraded to return to original conditions. 12/8-2/16/06
Composite	- Water levels at the 2 nd wetland crossing on the access road have increased since the last inspection following the snow. 2/16/06.	- Wetlands have not returned to the previous problem causing levels. Continue to monitor. 2/16/06.
	- Snow removal once again caused issues at the 2 nd and 3 rd wetland crossing along this access road. 2/16/06.	- Sediment was piled up and over the controls and needs to be removed from the wetlands. See erosion control section for more details 2/16/06
345kV H-Frame	- Work along the access roads continues in the vicinity of Hoyts Hill. The wetland crossings between here and Chestnut Ridge remain well in place. Significant clearing is underway and chips were placed along portions of the roads. 2/16/06	- Continue to maintain as needed. 2/2-2/16/06 -Some brush could be removed from wetlands between poles #6 and 7 and some areas could use silt fence along the road near the wetland edge between poles #5 and 6. 2/16/06

Areas of Inspection	Observation	Recommended Action
	<p>-Mats are in place in at least 5 wetland locations in the Bethel Reservoir section. Watch the crossings for muddy conditions and erosion controls. Silt fence was installed at pole #19 crossing but is still needed in some additional areas. 2/16/06</p> <p>-Watch for sediment tracking at the various road/ROW intersections. 2/16/06</p>	<p>- The crossings are well constructed and conditions were slightly improved with placement of wood chips on the access road. Continue to provide/extend silt fence- see the erosion control section for details. 2/16/06</p> <p>- Continue to monitor. Install stone at road access points or sweep the street as necessary. 2/16/06</p>
<p>Foundation construction Composite</p> <p>345kV H-Frame</p>	<p>- Dumpsters were in place near the Archers Lane area to remove materials. 2/16/06</p> <p>- Significant clearing was underway in the Chestnut Ridge to Hoyts Hill section. 2/9/06</p> <p>-Excavations continued for wooden pole installation in the Bethel Reservoir and the Chestnut Ridge/Hoyts Hill sections. Poles were being delivered to several locations and line work was noted. 2/9-2/16/06</p> <p>- Lines were being taken down from structures along the Bethel Reservoir section. 2/16/05</p>	<p>-None at this time. 2/16/06</p> <p>- None at this time. 2/16/06</p> <p>-There have been issues with getting poles delivered through narrow, rural roadways. 2/16/06</p> <p>- None at this time. 2/16/06</p>
<p>Erosion and Sediment Controls (includes inspection within 24 hours of a storm event)</p> <p>Composite</p>	<p>- Water levels increased to some degree at the 2nd wetland crossing along the Archers Lane access road. Snow plowing caused issues again with sediment piled over the controls at both the 2nd and 3rd wetland crossings. 2/16/06.</p> <p>- The 1st wetland crossing,</p>	<p>-The effectiveness of these controls have been reduced due to this. Sediment/snow piles will need to be pulled back from the wetlands and the controls cleaned up. See photos. 2/16/06</p> <p>- Solutions to prevent sedimentation and turbidity in</p>

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Erosion controls continued	<p>immediately within the Archers Lane site before the access road opens into the ROW continues to have increased sedimentation/turbidity issues from road run-off. Sediment accumulation in the wetland ranges from a thin layer on the leaves to several inches thick. 1/26-2/16/06</p> <p>- The 2nd structure in from Gallows Hill has a bare soil/boulder slope adjacent to the wetland with controls still well in place. 11/23-2/16/06.</p>	<p>the ponded water here need to be investigated and implemented. Cleaning out the sediment in the stone may help. 1/4-2/16/06</p> <p>- In areas where sediment is substantial and feasibly removable, contractors should shovel it out carefully by hand. 1/26-2/16/06</p> <p>- The area should be regraded, to final contours and restored when feasible. 12/1-2/16/06</p>
<p>345kV H-Frame</p> <p>Chestnut Ridge Section</p>	<p>- Significant clearing was occurring in the Chestnut Ridge section. Continue to provide good controls at the wetlands near poles #1 and 2. Some silt fence could be installed adjacent to the access road between poles #5 and 6. Conditions were muddy and wetlands are adjacent. 2/16/06</p> <p>-Some brush was noted in the wetland between poles #6 and 7 as a result of the clearing. 2/16/06</p> <p>- A large amount of sediment resulted from excavation for structure #6. Sediment was pulled back from the outer silt fence barrier to reduce strain. However, the majority of the pile is still in a wetland area. 2/2-2/16/06</p>	<p>-Continue to place controls at all four “corners” of the approach to the mats and crossings. Watch for increasingly muddy conditions on the mats and install silt fence along the road as needed. 2/16/06</p> <p>- Remove carefully when feasible. 2/16/06</p> <p>- Remove the soil here AS A feasible since the sediment and controls are already in a wetland area. Conditions may be too muddy at this time to do this without further impact. 2/16/06</p>
Bethel Reservoir Section to Chestnut Ridge Rd.	<p>- The stockpile from structure #9 foundation installation was still present. The silt fence here has a gap in coverage. 1/26-2/16/06</p> <p>- The matted crossing between proposed poles #10-11 had</p>	<p>- The stockpile should be removed as soon as feasible to prevent run-off to the road. 2/16/06</p> <p>- Install silt fence or haybales at the “four corners” of the mat. Consider stone or chips</p>

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	<p>become increasingly muddy but snow cover was now present. 1/26-2/16/06</p> <ul style="list-style-type: none"> - A small stockpile at the entrance to the ROW had silt fence installed. 2/16/06 - Conditions at the crossing between #17-18 had improved slightly due to placement of wood chips. Sedimentation was noted in the water below the mat here but may be caused by movement of the mats. 2/2-2/16/06 - Conditions were very muddy on the access road near proposed pole #19 beyond the original mat at the crossing. 2/16/06 - Silt fence was recommended at this structure as well due to its proximity to wetlands. 1/12-2/16/06 - Sediment has run-off the access road between poles #19 and 21 into some wetland pockets. 2/16/06 	<p>on the access road approach to remove some of the sediment accumulation. 2/2-2/16/06</p> <ul style="list-style-type: none"> - Check the fence after snow melt to make sure it is in good repair. 2/16/06 - Place silt fence or haybales at least along the north-eastern corner of the crossing to prevent run-off from the road. Place at all four corners if necessary. 2/16/06 - An additional mat (or more wood chips) should be installed with the first one to increase stability here. 2/16/06 - Install fence as necessary. Work had not yet reached this structure but the location was staked. 1/12-2/16/06 - Additional silt fence is needed here along the access road 2/16/06
<p>Inland Wetland and Watercourse encroachment and mitigation</p> <p>Composite</p>	<ul style="list-style-type: none"> - The D&M plan approved stone on geotextile fabric at the wetland crossings had worked well, but at three areas near Archers Lane, turbidity issues have been present. Run-off from the road, the drainage pipe, and snow plow issues had led to sedimentation. 1/4-2/16/06 - New deposits of sediment were noted in the wetlands beyond the controls at the 2nd and 3rd wetland crossings due to recent snow plowing. 2/16/06 - The rocks at the 1st crossing remain clogged with sediment 	<ul style="list-style-type: none"> - As the access is considered temporary, the stone will be removed when final work ends so the wetlands can be restored. 1/26-2/16/06 - Controls had been improved here but the recent plowing have caused issues again. The sediment has to be carefully pulled back from the wetland. 2/16/06 - The 1st crossing could also use some clean stone. Sediment will have to be

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345kV H-Frame	<p>and noticeable deposits were in the wetland. 1/4-2/16/06</p> <p>-Crossings were well installed but mats are getting muddy in several locations. 1/4-2/16/06</p> <p>- Sedimentation to the wetland was noted at the crossing between poles #17-18 2/2-2/9/06.</p> <p>- Use caution in removing trees from wetland areas or adjacent to streams. Avoid creating ruts when skidding them out. 1/19-2/16/06</p> <p>- Some brush was piled in the wetland between pole #6-7 due to the clearing activities. 2/16/06</p> <p>- At the excavation for proposed structure #6, a large amount of mud was contained within the silt fence but it was already within the wetland. 1/19-2/16/06</p>	<p>carefully removed. 1/4-2/16/06</p> <p>-See recommendations in erosion control section.1/4-2/16/06</p> <p>- This may be difficult to control as it may be from movement on the mats. 2/2-2/16/06</p> <p>- If channelization is noted as a result during the spring, the previously created ruts should be repaired if possible. Try to leave shrubs and low growth where possible, especially at stream buffers. 2/2-2/16/06</p> <p>-Carefully remove brush piles and trees from wetland areas. 2/16/06</p> <p>- The entire pile should be pulled back/removed and controls reinstalled closer to the pole. Conditions may be too muddy at this time. 2/16/06</p>
State species of concern, threatened and endangered species	<p>- The composite portion of overhead work includes state-listed turtle habitat area. 9/15-2/16/06.</p> <p>-The Eastern box turtle has not been observed since the first sighting and are likely hibernating. 2/16/06.</p>	<p>-Turtles would no longer be active at this time of year. 2/16/06</p>
Vegetative clearing limits (including trees to save or danger trees noted)	<p>- Significant clearing was ongoing in the Chestnut Ridge Rd. to Hoyts Hill section. Chips were being spread on the ROW in this area. 2/16/06</p> <p>- Efforts have been good to keep chips out of wetlands but more be needed leading up to mats to stabilize roads and</p>	<p>-Keep clearing to what is necessary. The D&M plan states low growing shrubs can remain. 12/22-2/16/06</p> <p>- Chips spread on the ROW should not be to a depth of more than 3" by the time the growing season is about to</p>

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	<p>reduce tracking. 2/16/06</p> <ul style="list-style-type: none"> - Trees are also being cleared adjacent to streams and wetlands to expand the ROW. 1/12-2/16/06 - Now that clearing is done at the stream crossing between #10-11. Remove any larger branches strewn in the stream. 2/9-2/16/06 Also, remove brush in the wetland between #6 and 7 2/16/06 	<p>begin. 1/4-2/9/06</p> <ul style="list-style-type: none"> - Stumps will remain and trees should be felled toward the mats to avoid ruts in the stream. 1/12-2/16/06 - Efforts to retain shrubs were noted in some sections. Attempt to retain buffers, especially at streams and wetlands. 2/2-2/16/06
Dewatering	<ul style="list-style-type: none"> - Active dewatering was not noted at a particular structure this week. 2/16/06 	<ul style="list-style-type: none"> - Release water to the ground only in well vegetated areas if it will not reach any resource areas. (Make sure to check downgradient for these areas- i.e. as in pole #6) Otherwise use a filter bag or adequate containment. 2/16/06
Blasting	<ul style="list-style-type: none"> -No blasting has been necessary at this time on the ROW. 2/16/06. 	<ul style="list-style-type: none"> -None at this time. 2/16/06.
Spills and Material Storage	<ul style="list-style-type: none"> - A piece of clearing equipment between poles #6 and 7 had a leak at the time of inspection. Contractors had noticed it and placed absorbent pads but additional ones were needed. It was being repaired at the time of inspection as well. 2/16/06 	<ul style="list-style-type: none"> - Continue to keep all vehicles maintained well (i.e. no apparent fluid leaks) if they will be used or stored on site - Keep adequately size fuel kits for worst case scenarios. - Report spills immediately, even if they are being controlled. - Take care not to get carried away and to be vigilant when refueling. Avoid refueling in the areas near the wetlands. Use proper storage for all materials.
Additional Observations		

Next likely scheduled inspection:

Wednesday-Thursday, February 22-23, 2006

I have personally examined and am familiar with the information submitted in this document and all attachments and certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief, and I understand that any false statements made in this document or its attachments may be punishable as a criminal offense in accordance with Section 22a-6 under Section 53a-157 of the Connecticut General Statutes.

Inspector's Signature: Diana Walden



(Composite Section): Photo on the left shows a view of the 2nd crossing along the road from Archers Lane. Snow removal/plowing caused several locations where sediment was pushed over the controls. This needs to be pulled back from the wetlands. 2/16/06



Photo on the left shows the 3rd wetland crossing from Archers Lane. Now and sediment from plowing was also piled on the erosion controls here. Photo on the right shows a dumpster in place for the removed materials. 2/16/06



345kV (H-Frame Section): Photo on the left shows work taking down existing lines at the location of proposed pole #21. Photo on the right shows where muddy conditions on the access road have resulted in sediment run-off to the wetland pockets. Erosion controls should be installed in this section. 2/16/06



Photo on the left shows where a second mat should be installed near the stream crossing at pole #19 to increase stability. Photo on the right shows the erosion control installed along the access road in the same area. 2/16/06



Photo on the left shows excavation occurring at a pole location along the Bethel Reservoir section. Photo on the right shows the wetland crossing between poles #17 and 18. Chips placed in the access road here have helped the tracking situation but silt fence should be installed at the approach. 2/16/06



Photo on the left shows a cleared area and lines being taken down in the Bethel Reservoir section. Photo on the right shows a stockpile with silt fence in place. The fence should be checked if repairs are needed following the snow melt. 2/16/06



Photo on the left shows a view of the soil stockpile near pole #9 off Chestnut Ridge Rd. This pile should be removed as soon as feasible. Photo on the right shows a leak at a piece of equipment pads were placed but more were needed. It was being fixed at the time of inspection. 2/16/06



View of the clearing effort that is ongoing along the Chestnut Ridge Rd. to Hoyts Hill section. Attempt to preserve shrubs where possible and carefully remove downed brush and trees from the wetland. 2/16/06



Photo on the left shows the excavation and silt fence near pole #6. snow may have impacted the silt fence. Check to see if it needs repairs and remove sediment when feasible. Photo on the right shows the clearing and chipping near pole #5. 2/16/06



View along the ROW of the cleared area between poles #5 and 6. Wood chips were spread along part of the access road. If chips are not placed along the entire way, silt fence should be added along the road towards #6 to prevent sedimentation to adjacent wetlands. 2/16/06